AKD GERWAH

Coupling for servo-motors
Torque: 22 to 600Nm

- ***Backlash and maintenance free***
- *Materials:*
  Hub: aluminium
  bellows: stainless steel
- *High torsional stiffness*
- *Low moment of inertia*
- *Shaft/bore link without backlash*
- *Recommended assembly tolerances H7/g6*
- *Working temperature: -30°C to +100°C*
- ***Please specify bore size on order (between min and max Ø)***

clamp hub

Options

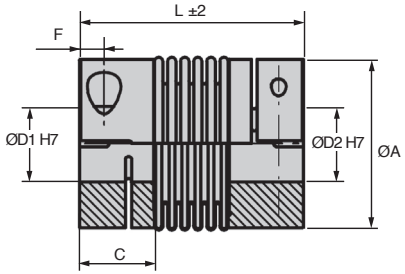
- *Keyway according to DIN6885 on request (tolerance JS9)*
- *Orientation of the keyways at 180° to each other*

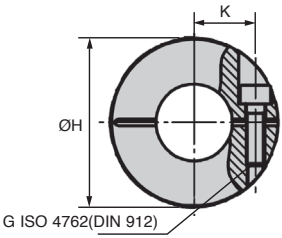
Part number	Misalignment radial (mm)	Misalignment axial (mm)	angular	Max. speed (rpm)	Weight (approx) (ca.kg)
AKD18	0,2	0,5	1,5°	12700	0,14
AKD30	0,2	0,5	1,5°	10200	0,26
AKD60	0,2	0,5	1,5°	8600	0,43
AKD80	0,2	0,5	1,5°	6800	0,79
AKD150	0,2	0,5	1,5°	6800	0,79
AKD200	0,2	0,5	1,5°	6300	1,12
AKD300	0,2	0,5	1,5°	5900	1,50
AKD500	0,2	1,0	1,5°	4900	2,04

Part number	Nominal torque (Nm)	Torsional stiffness (10^3Nm/rad)	Radial stiffness (N/mm)	Axial stiffness (N/mm)	Moment of inertia (10^{-3}kgm²)	Tightening torque (Nm)
AKD18	22	6	85	40	0,06	6
AKD30	36	25	220	30	0,10	12
AKD60	75	50	330	55	0,30	30
AKD80	95	75	400	55	0,90	60
AKD150	180	100	600	85	0,90	85
AKD200	240	120	450	85	1,50	100
AKD300	360	280	1500	150	3,20	120
AKD500	600	310	1000	85	4,90	190

Dimensions in mm

High Precision





DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-6%	On request

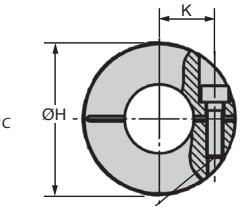
Part number	Bore øD1/D2 (H7)	C	L	øA	F	G	K	H	Price each
AKD18	8-26	20	71	45	6	M5	18	47	268,02 €
AKD30	10-30	25	73	55	8	M6	20	56	333,53 €
AKD60	12-35	29	89	64	10	M8	24	67	376,50 €
AKD80	14-42	34	103	80	12	M10	28	84	426,96 €
AKD150	14-42	34	103	80	12	M10	28	84	510,52 €
AKD200	22-46	38	113	90	13	M12	31	93	616,60 €
AKD300	24-60	38	115	110	13	M12	39	110	674,59 €
AKD500	35-64	41	122	119	15	M14	43	122	864,26 €

Dimensions in mm

AKN GERWAH

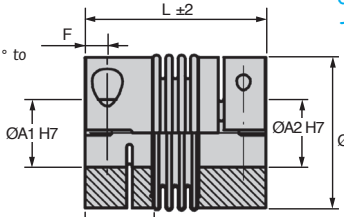
Coupling for servo-motors
Torque: 22 to 180Nm

- ***Backlash and maintenance free***
- *High torsional stiffness*
- *Low moment of inertia*
- *Shaft/bore link without backlash*
- *Recommended assembly tolerances H7/g6*
- *Working temperature -30°C to +100°C*
- *Materials:*
  Hub: aluminium
  Bellows: stainless steel
- ***Please specify bore size on order (between min and max Ø)***



Options

- *Keyway according to DIN6885 on request (tolerance JS9)*
- *Orientation of the keyways at 180° to each other*
- *Stainless steel version on request*



Torque calculation

- *Use the formula*

$T_{ax} > K \times T_{ac} \times J_{max}/(J_{mot}+J_{max})$ *in Nm*

With following safety coefficient:
K = 1.5 for regular motion
K = 2 for irregular motion
K = 2.5 - 4 for jerky motion
Jx = moment of inertia (machine + motor)
T_{ac} *Required torque*

High Precision

DISCOUNTS

Qty	1+	3+	6+
Disc.	List	-8%	On request

Part number	Max. speed (rpm)	Misalignment radial (mm)	axial (mm)	angular	Nominal torque (Nm)	Torsional stiffness (10^5 Nm/Rad)	Moment of inertia (10^{-3}kgm²)	Tightening torque (Nm)	Weight (kg)
AKN18-63	12 700	0,2	0,5	1,5°	22	8	0,05	6	0,13
AKN30-65	10 200	0,1	0,4	1,0°	36	35	0,11	12	0,25
AKN60-78	8 600	0,1	0,4	1,0°	75	75	0,29	30	0,41
AKN80-91	6 800	0,2	0,4	1,0°	95	130	0,87	60	0,74
AKN150-91	6 800	0,2	0,4	1,0°	180	150	0,87	85	0,74

Part number	ØA mini.	ØA maxi.	L	ØD	C	F	G	K	ØH	Pric each No keyway	1 to 2 With keyway
AKN18-63	8	26	63	45	20	6	M5	18	48	289,93 €	289,94 €
AKN30-65	10	30	65	55	25	8	M6	20	55	360,25 €	360,25 €
AKN60-78	12	35	78	64	29	10	M8	24	67	407,11 €	407,11 €
AKN80-91	14	42	90	80	33	12	M10	28	84	462,78 €	462,79 €
AKN150-91	14	42	90	80	33	12	M10	28	84	553,61 €	553,61 €

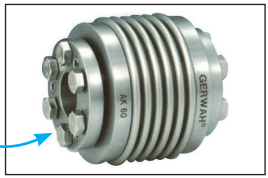
Dimensions in mm

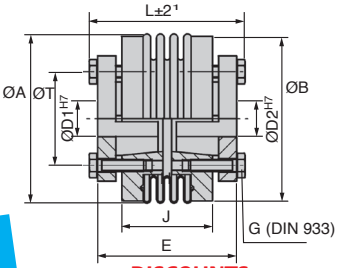
Couplings for servo-motors

Torque: 36 to 800Nm

GERWAH AK

- ***Backlash and maintenance free***
- *High torsional stiffness*
- *Low moment of inertia*
- *Shaft/bore link without backlash*
- *Recommended assembly tolerances H7/g6*
- *Working temperature -30°C to +100°C*
- *Materials:*
  Hub: steel
  Bellows: stainless steel
- ***Please specify bore size on order (between min and max Ø)***





Torque calculation

- *Use the formula*

$T_{KN} > K \times T_{AS} \times J_{mach}/(J_{mot}+J_{mach})$ *in Nm*

With following safety coefficient:

K = 1.5 for regular motion

K = 2 for irregular motion

K = 2.5 - 4 for jerky motion

JX = moment of inertia (machine + motor)

T_{AS} *Required torque*

High Precision

DISCOUNTS

Qty	1+	2+	4+
Disc.	List	-6%	On request

Part number	Nominal torque (Nm)	Stiffness torsional (10^3 Nm/Rad)	Stiffness radial (N/mm)	Stiffness axial (N/mm)	Moment of inertia (10^{-3}kgm²)	Tightening torque (Nm)	Weight (kg)	Misalignement radial (mm)	Misalignement axial (mm)	Misalignement angular (°)	Max. speed (rpm)
AK30-60	36	25	220	30	0,15	3,0	0,28	0,2	0,5	1,5	11 000
AK60-73	72	50	330	55	0,24	8,5	0,48	0,2	0,5	1,5	9 100
AK80-91	96	75	400	55	0,65	10,0	0,85	0,2	0,5	1,5	7 000
AK150-92	180	100	600	85	0,65	14,0	0,85	0,2	0,5	1,5	7 000
AK200-93	240	120	450	85	0,87	14,0	1,00	0,2	0,5	1,5	6 700
AK300-104	360	280	1500	150	2,33	18,0	1,92	0,2	0,5	1,5	5 200
AK500-113	800	310	1000	85	5,73	26,0	2,45	0,2	1,0	1,5	4 600

Part number	ØA (mm)	ØB (mm)	L	D H7/D H7 min.	D H7/D H7 max.	E	J	ØT	G	Price each
AK30-60	56	55	60	9	20	53	38	31	6 x M4	328,61 €
AK60-73	66	64	73	12	25	65	46	37	6 x M6	356,51 €
AK80-91	82	80	91	15	35	83	61	51	6 x M6	391,74 €
AK150-92	82	80	91	15	35	84	61	51	6 x M6	457,47 €
AK200-93	90	90	93	15	42	85	63	56	6 x M6	535,64 €
AK300-104	110	110	104	15	50	93	67	75	6 x M8	619,20 €
AK500-113	122	119	113	24	55	105	72	80	6 x M8	806,06 €

Dimensions in mm